



# MARSHALL STAR

Serving the Marshall Space Flight Center Community

July 8, 2004

## Marshall announces realignment



Photo by Emmett Given, NASA/Marshall Center

Marshall Center Director David King, right, and Rex Geveden, deputy director, take questions from Marshall team members following King's announcement that the center will undergo a strategic alignment over the next several months.

Marshall Center Director David King announced June 30 a new organization structure intended to strategically align the center to implement NASA's space exploration mission.

"Alignment will position the center to operate more effectively in a competitive environment with innovative approaches to doing business," said King. "It will create a robust and flexible organization that can successfully adapt to changing requirements and opportunities."

The new organization chart features three Program & Project offices, focused on Space Shuttle Propulsion, Space Transportation, and Science and Space Systems. The center's technical foundation will be an Engineering Directorate, a Science and Research Directorate and a Safety and Mission Assurance Directorate.

New offices created will include ones that will focus on human capital, information technology, and external and internal relations.

"These changes will provide clarity of function within the organization, enabling better communication with customers and stakeholders, resulting in better customer service," said King.

He said other advantages of the new organization are:

- consolidating and strengthening the center's engineering capability;
- aligning the center more closely with NASA's business structure;
- enabling better business forecasting and decision-making;
- providing a product focus while

## Seven selected for leadership program

Seven Marshall Center team members have been selected for the NASA Leadership Development Program. The program is a one-year developmental assignment and participants are chosen from across the Agency.

Selection was made by the Executive Development Education Panel.

The NASA Leadership Development Program is a results-based program designed to broaden the participants' knowledge and understanding of NASA. The 35 participants will take part in various assignments, developmental workshops, executive briefings and training opportunities throughout the program year. Employees may work at

*See Leadership on page 2*

## Cassini update

*From NASA Headquarters release*

Just two days after the Cassini space craft entered Saturn orbit, preliminary science results are already beginning to show a complex and fascinating planetary system.

One early result intriguing scientists concerns Saturn's Cassini Division, the large gap between the A and B rings. While Saturn's rings are almost exclusively composed of water ice, new findings show the Cassini Division contains relatively more "dirt" than ice. Further, the particles between the rings seem remarkably similar to the dark material that scientists saw on Saturn's

*See Cassini on page 4*

*See Realignment on page 2*

# Marshall leadership symposium set for Aug. 24



Maxwell



Watts

The Marshall Center will host a daylong leadership symposium Aug. 24 at the Von Braun Center in Huntsville. The event will focus on developing leaders who have the knowledge and skills to impact the present and the future.

The symposium, entitled "Leading in a Time of Change," is presented by the Marshall Center, its partners and the local community. It is intended to equip leaders of today and tomorrow with powerful tools that have direct application to their evolving work environments.

Attendees are expected to include both employees and managers and to emphasize the inclusive nature of leadership.

"Learning more about leadership is something that can benefit all of us. The skills we develop enable us to excel and inspire others to go beyond their known limits. This conference will help us all be better prepared to face the challenges that are ahead," said Marshall Center Director David King, executive

chairperson for the symposium.

"Leading in a Time of Change" is expected to help leaders and potential leaders develop strategies to accept new challenges and capitalize on opportunities in a changing environment. The symposium will bring together experts from industry, government and the community with a unique blend of backgrounds and experiences. The roster includes former U.S. Rep. J. C. Watts, R-Okla., and leadership expert Dr. John C. Maxwell.

The registration fee for non-NASA civil servants is \$125 through Aug. 11 and includes refreshments and a boxed lunch. Late registration will be \$175.

NASA personnel may register using NORS. NASA personnel not supported by NORS should contact the training department at their centers. Non-NASA personnel may register at <http://mi.msfc.nasa.gov/Leadership/index.html>.

For information, contact Vanessa Suggs at [Vanessa.P.Suggs@nasa.gov](mailto:Vanessa.P.Suggs@nasa.gov).

## Realignment

*Continued from page 1*

maintaining the center's core competencies.

These organizational changes resulted from recommendations created by a strategic alignment team headed by Marshall Center Deputy Director Rex Geveden and discussed and agreed to by the center's senior management team. Implementation teams have been formed to work to finalize the shape of the new organization. Transition to the new organization is expected to take up to six months to complete.

Last week Administrator Sean O'Keefe announced a transformation of NASA's organization structure to streamline the Agency and position it to better implement the Vision for Space Exploration. That Vision calls for the return of the Space Shuttle to flight, completion of the International Space Station, and human and robotic exploration of the Solar System. The Marshall Center expects to play a significant role in implementing the Vision.

## Job Announcements

**MS04C0128**, Supervisory, AST-Technical Management, GS-0801-15, Science Directorate, Microgravity Science and Applications Department. Closes July 12. Contact: Debbie Longeddy at 544-2308.

**MS04C0154**, Budget Analyst, GS-0560-07 (promotion potential to GS-11), Office of Chief Financial Officer, Budget Integration Office. Closes July 13. Contact: Dana Blaine at 544-7514.

**MS04C0155**, AST, Aerospace Flight Systems, GS-0861-14, Flight Projects Directorate, Flight Systems Department. Closes July 14. Contact: Carolyn Lundy

at 544-4049.

**MS04C0156**, Budget Analyst, GS-0560-12, Office of Chief Financial Officer, Budget Integration Office. Closes July 13. Contact: Dana Blaine at 544-7514

**MS04C0157**, AST, Environmental Control Systems, GS-0861-14, Flight Projects Directorate, Flight Systems Department. Closes July 14. Contact: Carolyn Lundy at 544-4049.

**MS04C0159**, Education Program Specialist, GS-1720-14, Customer and Employee Relations Department. Closes July 15. Contact: Edwina Bressette at 544-8115.

## Leadership

*Continued from page 1*

Agency Headquarters, another center, a federal agency, or private industry.

Marshall employees selected to participate are Pravin Aggarwal, Engineering Directorate; Cindy Campbell, Office of Chief Financial Officer; Helen Cole,

Science Directorate; Stacy Counts, Flight Projects Directorate; William Greene, Space Transportation Directorate; Robbie Hood, Science Directorate; and Andrew Keys, Science Directorate.

Nominations are made each spring.

# Testing of e-Payroll system going well, set for Aug. 8 switch

By Patricia Dedrick Lloyd

**E**-Payroll testing is going well and NASA is on schedule to adopt the Department of Interior's Federal Personnel and Payroll System on Aug. 8.

In preparation for this transition, the e-Payroll team, the Consolidated Payroll Office and Human Resources have performed four tests to ensure that everything is ready for the August switch. A final test is scheduled from July 11 to July 30.

"The testing to date has given us a strong indication that we can seamlessly switch from the NASA Personnel Payroll System (NPPS) to the Federal Personnel and Payroll System (FPPS) in August. We

will not switch payroll systems unless we are absolutely confident that everyone will be paid correctly," said Ona Elliott, the e-Payroll project manager.

The tests were designed to validate, on a small or Agency-wide scale, the e-Payroll system's ability to process human resources and payroll transactions, calculate and process NASA's payroll and produce the files or interfaces that connected systems require.

The e-Payroll initiative, which is one of 24 e-Government initiatives in the President's Management Agenda, will consolidate the federal government's 22 payroll providers initially to four and then to two. The Office of Personnel Manage-

ment expects this consolidation to eliminate redundancies in payroll processing, reduce costs and develop a solid foundation for achieving the vision outlined in the Federal e-Government Strategy.

Meetings to review the e-Payroll transition with Marshall Center managers and administrative personnel will be held at 10 a.m. and 1 p.m. on July 28 in the Morris Auditorium.

For more information, call Beverly Fruehauf at 544-1704 or go to <http://epayroll.nasa.gov/info.html>

*The writer, an employee of ASRI, is the Marshall Star editor.*

## Shuttle Discovery work progressing

Kennedy Space Center release

**O**rbiter Discovery's scheduled power-down period for its Return to Flight mission, STS-114, to the International Space Station is progressing well. The Return to Flight modifications, including the orbiter boom sensor-system wiring and preparations for installation of the wing leading-edge sensors are almost complete. The External Tank camera wiring harness is installed.

Reinforced Carbon-Carbon (RCC) panel installation is almost complete on both of the wing leading edges, with two panels remaining to be hung on the left-hand side and three panels remaining to be hung on the right-hand side.

Processing continues on Atlantis in the Orbiter Processing Facility in support of its future mission to the International Space Station. The majority of the external flex hose inspections are complete, and the internal flex hose inspections have begun. Each vehicle has about 300 flex hoses, which are flexible tubing between two fixed ends.

Previous Space Shuttle processing status reports are available on the Internet at: <http://www-pao.ksc.nasa.gov/kscpao/status/status.htm>



Photo by Terry Leibold, NASA/Marshall Center

### ***I AM SET Program will hold awards luncheon July 15***

Marshall team members Chip Dobbs, left, and Shervie Miller, center, join Dr. Barbara Cady, project director, to look over the poster used for this year's I Am Set program. High school and college students with disabilities are paired with mentors at Marshall or its contractors for a month to study math, science, engineering or other technology fields. The program, a collaborative effort of the Marshall Center and Alabama A&M University, ends July 16. An awards luncheon for students, mentors and parents is set for July 15 at Alabama A&M.

## Martin Road work to continue for a year

**W**ork began June 28 to widen Martin Road into four lanes from Patton Road to Gate 1. There will be no median and one-way traffic on Martin Road will cease once the project is complete.

Huntsville city traffic engineers are also surveying the Whitesburg-Martin Road intersection to determine whether to change the east-bound center lane into a three-way lane. A three-way lane would allow the traffic to continue straight or turn right.

The contractor has a year and a month to finish the construction project.

For more information, call Danny Davis at 544-0491.



# Students build hardware to train Space Station crew

By Lori Johnston

High school students from three Texas and Alabama schools have used their time in wood and metal shops to build custom-designed astronaut training hardware.

The program, called High School Students United with NASA to Create Hardware, or HUNCH, links a unique educational experience with a real need in the space program.

Last month, representatives from the Marshall Center and Brewer High School in Somerville traveled to Houston to deliver the first payload, or cargo stowage lockers, built entirely by students for astronauts to train for missions on the International Space Station.

The traditional training lockers for Space Station racks can cost more than \$10,000 to manufacture. With budgets tightening, Stacy Hale and Bob Zeek, payload training capability project



**International Space Station Program Manager William Gerstenmaier, left, discusses the HUNCH locker project with its co-creators -- the Marshall Center's Bob Zeek, rear center, and the Johnson Space Center's Stacy Hale, right.**

managers at the Johnson Center and Marshall Center respectively, decided hardware produced by students might be a suitable alternative for flight controller and crew training needs.

HUNCH students from the Huntsville Center for Technology and Brewer High School are helping build the multi-use lockers or drawers. The Space Station crew and ground support personnel will use them to practice conducting science experiments in space.

Huntsville and Brewer HUNCH students recently toured Marshall Center facilities and discussed the project's

details. The students met with NASA engineers, viewed manufacturing areas and visited the Payload Operations Center.

*The writer, an employee of ASRI, supports the Media Relations Department.*

## Cassini

*Continued from page 1*

moon, Phoebe. These dark particles refuel the theory that the rings might be the remnants of a moon. The F ring was also found to contain more dirt.

Another instrument on Cassini has detected large quantities of oxygen at the edge of the rings. Scientists are still trying to understand these results, but they think the oxygen may be left over from a collision that occurred as recently as January of this year.

"In just two days, our ideas about the rings have been expanded tremendously," said Dr. Linda Spilker, of NASA's Jet Propulsion Laboratory, deputy project scientist for the Cassini-Huygens mission. "The Phoebe-like material is a big surprise. What puzzles us is that the A and B rings are so clean and the Cassini Division between them appears so dirty."

Cassini entered Saturn's orbit on June 30. The highly polished optics and mirrors on the spacecraft's Composite Infrared Sensor were designed and built at the Marshall Center.

The visual and infrared mapping spectrometer onboard Cassini revealed the dirt mixed with the ice in the Cassini Division and in other small gaps in the rings, as well as in the F ring.

"The surprising fingerprint in the data is that the dirt appears similar to what we saw at Phoebe. In the next several months we

will be looking for the origin of this material," said Dr. Roger Clark, of the U.S. Geological Survey, Denver, Colo., and a member of the Cassini science team.

Cassini's ultraviolet imaging instrument detected the sudden and surprising increase in the amount of atomic oxygen at the edge of the rings. The finding leads scientists to hypothesize that something may have collided with the main rings, producing the excess oxygen.

Early Friday, Cassini imaged Saturn's largest moon Titan, one of the prime targets for the mission. Titan is thought to harbor simple organic compounds that may be important in understanding the chemical building blocks that led to life on Earth. Although too cold to support life now, Titan serves as a frozen vault to see what early Earth might have been like.

The Cassini-Huygens mission is a cooperative project of NASA, the European Space Agency and the Italian Space Agency. The Jet Propulsion Laboratory, a division of the California Institute of Technology in Pasadena, manages the Cassini-Huygens mission for NASA's Office of Space Science, Washington, D.C. JPL designed, developed and assembled the Cassini orbiter.

# Announcements

---

## Retired federal employees to meet Saturday at Senior Center

The National Association of Retired Federal Employees will meet at 9:30 a.m. Saturday at the Senior Center on Drake Avenue. Janet Combs will discuss hearing aids. The Huntsville Chapter 443 will also honor its members for providing 50 years of service. For more information, call 881-4944.

## Hazardous waste training set for July 14

The next Hazardous and Controlled Waste Generator Training will be held from 9-11 a.m., July 14, in Morris Auditorium. Registration begins at 8:30 a.m. This training is mandatory for all Marshall team members who generate or accumulate hazardous and controlled waste at the Marshall Center. Training must be done annually. Dec. 1 is the last class for 2004.

## Center Operations redesigns Web site; products easier to get

Center Operations Directorate has redesigned its Web site to make it easier for customers to obtain products and services from the directorate. A single portal now provides easy access for placing an order, obtaining additional information about a particular service, and viewing products and services provided by the directorate. The newly designed site is: <http://co.msfc.nasa.gov/> or access it from "Inside Marshall."

## Redstone Arsenal hunting and fishing town hall meeting set

Redstone Arsenal's Hunting and Fishing Council is holding a town hall meeting at 6 p.m., July 22, at the Campbell Recreation Center. The open forum is for those who hunt and fish on the Arsenal to learn about any regulation changes and to ask questions. E-mail Bill Moreland at [bill.moreland@redstone.army.mil](mailto:bill.moreland@redstone.army.mil) for further information.

## Team Redstone advance planning briefing set for July 13-14

The 2004 Team Redstone Advance Planning Briefing for Industry (APBI) will be held July 13-14, at the U.S. Army Aviation and Missile Command, Bob Jones Auditorium, on Redstone Arsenal. This briefing is a continuing effort to keep industry informed of the U.S. Army's long-range technology development objectives and contractual opportunities. This year's conference theme is "Rapid Reaction to Battlefield Requirements Today & Tomorrow."

Register online at <http://apbi.redstone.army.mil>.

## New procedures for Facilities Work Request in effect

In accordance with MPG 8812.1B, the Facilities Engineering Department will only accept a Facilities Work Request (Form 199) when authorized in writing at a group lead level or above. For more information, call Nell Clemmons at 544-7845 or see "Inside Marshall."

## 'Inside Marshall' has current news on Marshall alignment

Marshall team members can get current information on the Marshall Center's strategic alignment and the NASA Transformation from a new link on "Inside Marshall." Go to: <http://inside.msfc.nasa.gov/nasa-transform.html>

## Annual ski week is Feb. 5-12 at Park City Resort

The 14th Annual NASA Ski Week will be Feb. 5-12, at Park City Resort in Utah, near Salt Lake City. Skiers and riders from seven NASA centers will gather at this Olympic-sized, triple-resort-area for camaraderie and winter sports. All Marshall team members, retirees, spouses, and dependents are eligible to participate. For information, call Tom Dollman at 233-0705 or e-mail him at [tom.dollman@nasa.gov](mailto:tom.dollman@nasa.gov). Use "NASA ski week" in the subject line.

## Washington, D.C., bans cell phones by motorists

A new Washington, D.C., law bans motorists from using hand-held cell phones while driving.

If ticketed, drivers could be fined \$100 and levied one point against their license. This law is effective July 1 and applies to all drivers in D.C., regardless of which city they reside.

## International shipments must clear U.S. Customs Service

All international shipments to the Marshall Center must be cleared through the U.S. Customs Service, Huntsville Port of Entry. The Transportation and Logistics Engineering Group is the center's point of contact for the Customs Service and will make all customs clearances. For more information, call Nancy J. Spears at 544-7561 or see "Inside Marshall."

## New form, address for NASA Safety Reporting System

NASA Headquarters has released a new form and mailing address for use with the NASA Safety Reporting System. The system is a way for Marshall and other Agency team members to report unsafe acts or concerns. The new mailing address is NSRS, P.O. Box 5826, Bethesda, MD 20824. An electronic form is available at <http://www.hq.nasa.gov/nsrs>.

## MARS Tennis Club sets doubles tournament for Saturday

The Mars Tennis Club will hold a doubles tournament starting at 8:30 a.m., Saturday. Players will be matched with a doubles partner at the tournament. The event is open to MARS Tennis Club members only. For more information, call Ronda Moyers at 544-6809.

# Classified Ads

## Miscellaneous

- ★ Mattress and box springs, queen, \$10. 830-1648
- ★ Kenmore washer and dryer, almond, \$325; Lane sleeper sofa, neutral, \$150. 726-8686
- ★ Sears microwave oven, large volume, 1.6 cu. ft., \$50; Jackson vine, \$9 each. 881-6040
- ★ Knight in-line disc muzzle loader, .50caliber, black composite stock, blued steel barrel, new, \$250. 880-7305
- ★ Easy setup pool, 15'x3', \$75; Craftsman weed eater, \$25; Wieder home gym, \$250. 256-858-5552
- ★ Adams tight lies golf clubs, 3, 5, & 7 wood w/ head covers, \$40 ea./\$100 all. 256-348-2298
- ★ Lee Roberson Golden Collector Series art prints, signed and numbered. 883-6446
- ★ Browning 12-gauge, 2-3/4-3", gold hunter camo colt .380; Hodgman waders, 1200 gr., size 10, \$150. 259-5140
- ★ MTD 22" lawnmower w/side-bag grass catcher, \$40; Desert Empire gerbil cage & accessories, \$10. 881-4148 after 6 p.m.
- ★ GE Profile washer/dryer, 3.2 cu. ft., washer, 5.7 cu. ft. dryer, bisque, 3 yrs. old, \$450. 533-5942
- ★ Bushmaster AR15 20" HB, ANIB, \$750. 828-8630
- ★ Hamilton drafting table, 40"x60", adjustable tilt and elevation, \$100. 325-2823
- ★ Two Cherry wall units, \$300 for pair. 256-828-2237
- ★ Glasstite high-rise camper top for 1993-2004 Ford Ranger, metallic teal green, screened windows, \$450. 426-4142
- ★ Two 2-chamber FlowMaster mufflers, \$125. 256-572-1197
- ★ Set of four new Michelin steel belted radial tires, P205/75R15, never used, make offer. 772-3051
- ★ Whirlpool washer & dryer, heavy duty, \$100 pair, will sell separately. 479-2651
- ★ Russell Bermuda hay, square bales, \$2.50/field; \$3/barn, call for baling dates, delivery available. 256-232-8311
- ★ Contemporary design dishes, four place settings, Gallery Collections by Ranmaru, 23 items, \$40. 837-0656
- ★ White toddler bed with mattress, \$50. 230-6382 after 5 p.m.
- ★ RCA television, 27" console w/remote, \$25. 256-586-7424
- ★ Punching bag for boxing practice, \$40. 881-8674
- ★ Electric power chair, Pride Jet 1, 250# capacity, 19.5 turning radius, \$1,600. 256-637-6490

- ★ 1989 Mastercraft Tristar 190 open bow, 250 hours on engine, one-owner, \$8,500. 340-0422
- ★ Two tickets, American Idol Live, Nashville, Aug. 14, floor seats near stage, \$75 each. 837-7334
- ★ Dining suite: table, 2 leaves, 6 chairs, china cabinet, server, light pine, \$300. 837-0037
- ★ Assortment of wood for woodworking, \$20. 536-8951
- ★ White toddler bed with mattress, no rails, \$40. 468-5242
- ★ Kenmore Washer, Dryer, \$125 each; poster king bed, springs, mattress, \$500; 30x60 desk, \$75. 534-9631
- ★ Nitro Bass Boat with 150HP Johnson engine, onboard charger and hydraulic steering, \$7,500. 259-0330
- ★ Apollo 11 25th Anniversary wristwatch. 24K electroplated gold, never activated, still in case, \$20. 306-0700
- ★ G.E. Power downdraft range, unit has two burners and griddle, \$100. 722-2821
- ★ Pennsylvania House sofa, \$300. 232-6626
- ★ Green Daybed (trundle, mattress & bedding), \$150; Bakers Rack, \$50; end table, \$25. 539-7857
- ★ Top Loading Baby Swing, \$25; Portable Bassinet, \$25; Stroller/Car Seat Set, \$70. 784-5299
- ★ Short Blue Sofa, \$45. 430-6842
- ★ Acuity youth golf clubs, graphite shafts, two woods, three irons, putter & stand bag, \$50. 656-0461
- ★ Pool Table 4x8, 1" slate, lifetime warranty/delivery/recovering \$900; you pickup \$700 obo. 652-9623
- ★ Story & Clark Studio Piano; solid maple with 3 strings keys, \$1,500. 325-0554

## Vehicles

- ★ 1986 Toyota 4-Runner, white, 4x4, automatic, 4-cyl., new tires & wheels, receiver hitch, extras, \$4,200. 256-509-5340
- ★ 1997 Mercedes Benz SL500 Roadster, red/cream leather, hard-top included, 57K miles, auto, loaded, \$30,000. 256-683-2209
- ★ 1986 Chevy Custom G20 van, captain's chairs, class 3 hitch, slight exhaust leak, \$1,500. 430-6162
- ★ 2001 Hyundai Sonata GLS, V6, 52K miles, leather, new tires, all-power, \$10,500. 883-9436
- ★ 1989 Jeep Cherokee Pioneer, 4wd/v6, towing package, maroon, CD, 148K miles, \$2,300. 653-7350
- ★ 1994 Ford 3930 tractor, diesel, 8-speed, roll bar, 46HP, \$8,000. 325-6000
- ★ Gulfstream, 36', 24K miles, generator, hydrl. jacks, tv, vcr, camera, awning, bath, kitchen, bedroom, \$42,000. 256-931-0177
- ★ 2002 Nissan Pathfinder SE, 4-door, 4wd, SUV, 17K miles, silver, loaded, all-power, \$23,800. 751-1950

- ★ 1999 Acura, 3.5 RL, 4-door sedan, automatic, leather, many options, \$9,500. 881-8674
- ★ 2001 Toyota Corolla S, 98K miles, auto, black, a/c, all-power, 39mpg highway, \$7,200. 426-2516
- ★ 2004 Chevrolet Trail Blazer LS, automatic, all-power, 14K miles, Blue towing packing; \$24,500. 509-0387
- 1999 Tacoma short bed truck, 46K miles, 5-speed, Blue, \$6,600. 520-4501
- ★ 1996 Ford Ranger XLT Supercab, teal, 4L.v6, 5-sp manual, a/c, loaded, 100K miles, \$5,900 obo. 232-1644
- ★ 1989 Buick LeSabre, auto/pw/ps/pb, 186K miles, \$750. 468-9219
- ★ 2000 Oldsmobile Alero GL, 2-door coupe, light blue, all-power, 57K miles, \$7,495. 828-5550
- ★ 1997 Ford Ranger XLT, Regular Cab, Stepside, 4-cyl, 5-speed, red/grey interior, 124k miles, \$3,800. 256-351-8990
- ★ 1987 Plymouth Voyager LE, 115K miles, garage kept, new tires, \$1780. 880-6563
- ★ 1992 Toyota Camry LE, 225K miles, \$2700. 880-6563

## Wanted

- ★ Homelite weed eater for parts. 883-2757
- ★ Apple wood, will cut and pick up. 656-2965
- ★ Affordable used Kayak for local creeks. 714-3576
- ★ Roommate; 12 miles to gate 9; all utilities included; \$450/month. 864-8474
- ★ Mini Van or Car to be purchased or donated for needy family. 325-6000
- ★ Refrigerator, Reasonably Priced. 508-0509

## Found

- ★ Set of keys. Call 544-3623 to claim/identify
- ★ Necklace near Bldg. 4663. Call 544-3623 to claim/identify

## Free

- ★ Persian cat, spayed, red & white, loving, 7 years old, no children, cats or dogs. 751-4043
- ★ Six mixed Australian Shepherd puppies born May 23, 2004. 881-0438 or 653-9137

# MARSHALL STAR

Vol. 44/No. 41

Marshall Space Flight Center, Alabama 35812  
(256) 544-0030  
<http://www1.msfc.nasa.gov>

The Marshall Star is published every Thursday by the Internal Relations and Communications Department at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Monday noon to the Marshall Internal Relations and Communications Department (CD40), Bldg. 4200, room 101. Submissions should be written legibly and include the originator's name. Send electronic mail submissions to: [intercom@msfc.nasa.gov](mailto:intercom@msfc.nasa.gov) The Marshall Star does not publish commercial advertising of any kind.

Manager of Internal Relations  
and Communications — Steven Durham  
Editor — Patricia Dedrick Lloyd

U.S. Government Printing Office 2004-633-065-60111

Permit No. G-27  
NASA  
Postage & Fees PAID  
PRE-SORT STANDARD